#### MATERIAL SAFETY DATA SHEET

### 321 HS Undercoat Epoxy Primer Gray Base



Akzo Nobel Coatings International Paint LLC 2270 Morris Avenue P. O. Box 386 Union, NJ 07083 Sales Order: {SalesOrd}
MSDS Revision No: E1 -2

02/17/2012

EMERGENCY NUMBERS:

MSDS Revision Date:

 (800) 424–9300
 CHEMTREC (USA)

 (703) 527–3887
 CHEMTREC (Intl)

 (800) 854–6813
 Poison Control Center

 CUSTOMER SERVICE:
 (Non–Emergency)

 (800) 589–1267
 International Paint

 (800) 631–7481
 Interlux

#### 1. GENERAL INFORMATION

Product Identity: 321 HS Undercoat Epoxy Primer Gray Base

Bulk Sales Reference No: OR1100

**IMPORTANT:** Read this MSDS before handling or disposing of this product, and provide this information to the employee, customers, and users of this product. PLEASE NOTE THE MSDS REVISION NUMBER AT THE TOP OF THIS PAGE. If the MSDS Revision Number posted at the top of this page does not match the MSDS Revision Number on the product label, please contact Customer Service at the phone number included above for the correct MSDS. This product is covered by the OSHA Hazard Communication Standard and this document has been prepared in accordance with requirements of this standard.

**NOTICE:** OSHA hazardous chemicals are listed in Section 2 if present at 1% or more. Carcinogens and extraordinarily/special hazardous chemicals are listed in Section 2 if present at .1% or more. Additional regulatory information for specific chemical categories is included in Section 15.

#### 2. HAZARDOUS INGREDIENT INFORMATION

| CAS No.                 | Ingredient Name & %         | Source  | Exposure Data  |  |
|-------------------------|-----------------------------|---|--|--|
|                         |                             | OSHA:   | 100 ppm TWA; 300 mg/m3 TWA50 ppm Ceiling; 150 mg/m3 Ceiling  |  |
|                         |                             | ACGIH:  | 20 ppm TWA   |  |
|                         |                             | NIOSH:  | 50 ppm Ceiling; 150 mg/m3 Ceiling1400 ppm IDLH (10% LEL)   |  |
|                         |                             | Supplier:   | No Established Limit   |  |
|                         | Determine                   | OHSA, CAN:  | 20 ppm TWA   |  |
| 0000071-36-3            | Butanol 1.0 – 10% by Weight | Mexico:   | No Established Limit   |  |
|                         | 1.0 - 10 /8 by Weight       | Brazil:   | No Established Limit   |  |
|                         |                             | Source  | Health Data  |  |
|                         |                             | NIOSH:  | Eye and mucous membrane irritation CNS depression  |  |
|                         |                             | Source  | Carcinogen Data  |  |
|                         |                             | OSHA:   | Select Carcinogen: No  |  |
|                         |                             | NTP:  | Known Carcinogen: No; Suspected Carcinogen: No   |  |
|                         |                             | IARC:   | Group 1: No; Group 2A: No;<br>Group 2b: No; Group 3: No; Group 4: No   |  |
|                         |                             |   |  |  |
| CAS No.                 | Ingredient Name & %         | Source  | Exposure Data  |  |
| CAS No.                 | Ingredient Name & %         | Source<br>OSHA:   | Exposure Data  No Established Limit  |  |
| CAS No.                 | Ingredient Name & %         |   |  |  |
| CAS No.                 | Ingredient Name & %         | OSHA:   | No Established Limit   |  |
| CAS No.                 | Ingredient Name & %         | OSHA:<br>ACGIH:   | No Established Limit No Established Limit  |  |
| CAS No.                 |                             | OSHA:<br>ACGIH:<br>NIOSH:   | No Established Limit No Established Limit 25 ppm TWA; 125 mg/m3 TWA  |  |
| CAS No.<br>0000095–63–6 | 1,2,4-Trimethyl benzene     | OSHA: ACGIH: NIOSH: Supplier:   | No Established Limit No Established Limit 25 ppm TWA; 125 mg/m3 TWA No Established Limit   |  |
|                         |                             | OSHA: ACGIH: NIOSH: Supplier: OHSA, CAN:                                      | No Established Limit No Established Limit 25 ppm TWA; 125 mg/m3 TWA No Established Limit No Established Limit  |  |
|                         | 1,2,4-Trimethyl benzene     | OSHA: ACGIH: NIOSH: Supplier: OHSA, CAN: Mexico:                              | No Established Limit No Established Limit 25 ppm TWA; 125 mg/m3 TWA No Established Limit No Established Limit No Established Limit   |  |
|                         | 1,2,4-Trimethyl benzene     | OSHA: ACGIH: NIOSH: Supplier: OHSA, CAN: Mexico: Brazil:                      | No Established Limit No Established Limit 25 ppm TWA; 125 mg/m3 TWA No Established Limit No Established Limit No Established Limit No Established Limit  |  |
|                         | 1,2,4-Trimethyl benzene     | OSHA: ACGIH: NIOSH: Supplier: OHSA, CAN: Mexico: Brazil: Source               | No Established Limit No Established Limit 25 ppm TWA; 125 mg/m3 TWA No Established Limit No Established Limit No Established Limit No Established Limit Health Data  |  |
|                         | 1,2,4-Trimethyl benzene     | OSHA: ACGIH: NIOSH: Supplier: OHSA, CAN: Mexico: Brazil: Source NIOSH:        | No Established Limit No Established Limit 25 ppm TWA; 125 mg/m3 TWA No Established Limit Health Data No Established Limit |  |
|                         | 1,2,4-Trimethyl benzene     | OSHA: ACGIH: NIOSH: Supplier: OHSA, CAN: Mexico: Brazil: Source NIOSH: Source | No Established Limit No Established Limit 25 ppm TWA; 125 mg/m3 TWA No Established Limit Health Data No Established Limit Carcinogen Data      |  |

| CAS No.           | Ingredient Name & %                                 | Source             | Exposure Data  |  |  |
|-------------------|---|--------------------|--|--|--|
| 0000100 41 4      | Benzene, ethyl– 1.0 – 10% by Weight                 | OSHA:              | 100 ppm TWA; 435 mg/m3 TWA125 ppm STEL; 545 mg/m<br>STEL                       |  |  |
|                   |   | ACGIH:             | 100 ppm TWA125 ppm STEL  |  |  |
|                   |   | NIOSH:             | 100 ppm TWA; 435 mg/m3 TWA125 ppm STEL; 545 mg/m3 STEL800 ppm IDLH (10% LEL)   |  |  |
|                   |   | Supplier:          | No Established Limit   |  |  |
|                   |   | OHSA, CAN:         | 100 ppm TWA125 ppm STEL  |  |  |
|                   |   | Mexico:            | 100 ppm TWA; 435 mg/m3 TWA125 ppm STEL; 545 mg/m3 STEL                         |  |  |
|                   |   | Brazil:            | 78 ppm TWA; 340 mg/m3 TWA  |  |  |
|                   |   | Source             | Health Data  |  |  |
|                   |   | NIOSH:             | Eye skin   |  |  |
|                   |   | Source             | Carcinogen Data  |  |  |
|                   |   | OSHA:              | Select Carcinogen: Yes   |  |  |
|                   |   | NTP:               | Known Carcinogen: No; Suspected Carcinogen: No                                 |  |  |
|                   |   | IARC:              | Group 1: No; Group 2A: No; Group 2b: Yes; Group 3: No; Group 4: No             |  |  |
| CAS No.           | Ingredient Name & %                                 | Source             | Exposure Data  |  |  |
| <i>3</i> 7.0 1.0. | ingredient Name & 70                                | OSHA:              | 15 mg/m3 TWA (total dust); 5 mg/m3 TWA (respirable fraction                    |  |  |
|                   |   | ACGIH:             | No Established Limit   |  |  |
|                   |   | NIOSH:             | 10 mg/m3 TWA (total dust); 5 mg/m3 TWA (respirable dust)                       |  |  |
|                   |   | Supplier:          | No Established Limit   |  |  |
|                   |   | OHSA, CAN:         | No Established Limit   |  |  |
| 0001317–65–3      | Limestone<br>10 – 25% by Weight                     | Mexico:            | 10 mg/m3 TWA20 mg/m3 STEL  |  |  |
|                   | 10 – 25% by Weight                                  | Brazil:            | No Established Limit   |  |  |
|                   |   | Source             | Health Data  |  |  |
|                   |   | NIOSH:             | Eye and skin irritation Physical irritation                                    |  |  |
|                   |   | Source             | Carcinogen Data  |  |  |
|                   |   | OSHA:              | Select Carcinogen: No  |  |  |
|                   |   | NTP:               | Known Carcinogen: No; Suspected Carcinogen: No                                 |  |  |
|                   |   | IARC:              | Group 1: No; Group 2A: No;<br>Group 2b: No; Group 3: No; Group 4: No           |  |  |
| CAS No.           | Ingredient Name & %                                 | Source             | Exposure Data  |  |  |
|                   |   | OSHA:              | 100 ppm TWA; 435 mg/m3 TWA150 ppm STEL; 655 mg/m3 STEL                         |  |  |
|                   |   | ACGIH:             | 100 ppm TWA150 ppm STEL  |  |  |
|                   |   | NIOSH:             | No Established Limit   |  |  |
|                   |   | Supplier:          | No Established Limit   |  |  |
|                   | Xylenes (o-, m-, p- isomers)<br>1.0 - 10% by Weight | OHSA, CAN: Mexico: | 100 ppm TWA150 ppm STEL 100 ppm TWA; 435 mg/m3 TWA150 ppm STEL; 655 mg/m3 STEL |  |  |
| 0001330–20–7      |   | Brazil:            | 78 ppm TWA; 340 mg/m3 TWA  |  |  |
|                   |   | Source             | Health Data  |  |  |
|                   |   | NIOSH:             | Central nervous system depressant; respiratory and eye irritation              |  |  |
|                   |   | Source             | Carcinogen Data  |  |  |
|                   |   | OSHA:              | Select Carcinogen: No  |  |  |
|                   |   | NTP:               | Known Carcinogen: No; Suspected Carcinogen: No                                 |  |  |
|                   |   | IARC:              | Group 1: No; Group 2A: No;<br>Group 2b: No; Group 3: Yes; Group 4: No          |  |  |
| CAS No.           | Ingredient Name & %                                 | Source             | Exposure Data  |  |  |
| 07.0110.          | ingredient Harrie & 70                              | OSHA:              | No Established Limit   |  |  |
|                   |   | ACGIH:             | No Established Limit   |  |  |
|                   |   | AUGIII.            | 140 Established Ellilli  |  |  |

|                         |   | NIOSH:   | 6 mg/m3 TWA3000 mg/m3 IDLH   |
|-------------------------|---|--|--|
|                         |   | Supplier:  | No Established Limit   |
|                         |   | OHSA, CAN:   | No Established Limit   |
|                         |   | Mexico:  | No Established Limit   |
|                         |   | Brazil:  | No Established Limit   |
|                         |   |  | Health Data  |
|                         |   | Source   |  |
|                         |   | NIOSH:   | No Established Limit   |
|                         |   | Source   | Carcinogen Data  |
|                         |   | OSHA:  | Select Carcinogen: No  |
|                         |   | NTP:   | Known Carcinogen: No; Suspected Carcinogen: No   |
|                         |   | IARC:  | Group 1: No; Group 2A: No;<br>Group 2b: No; Group 3: Yes; Group 4: No  |
| CAS No.                 | Ingredient Name & %                                       | Source   | Exposure Data  |
|                         |   | OSHA:  | No Established Limit   |
|                         |   | ACGIH:   | No Established Limit   |
|                         |   | NIOSH:   | No Established Limit   |
|                         |   | Supplier:  | No Established Limit   |
|                         |   | OHSA, CAN:   | No Established Limit   |
| 0007770 00 0            | Trizinc diphosphate                                       | Mexico:  | No Established Limit   |
| 0007779–90–0            | 1.0 – 10% by Weight                                       |  |  |
|                         |   | Brazil:  | No Established Limit   |
|                         |   | Source   | Health Data  |
|                         |   | NIOSH:   | No Established Limit   |
|                         |   | Source   | Carcinogen Data  |
|                         |   | OSHA:  | Select Carcinogen: No  |
|                         |   | NTP:   | Known Carcinogen: No; Suspected Carcinogen: No   |
|                         |   | IARC:  | Group 1: No; Group 2A: No;<br>Group 2b: No; Group 3: No; Group 4: No   |
|                         |   |  |  |
| CAS No.                 | Ingredient Name & %                                       | Source   | Exposure Data  |
| CAS No.                 | Ingredient Name & %                                       |  | Exposure Data 15 mg/m3 TWA (total dust)  |
| CAS No.                 | Ingredient Name & %                                       | OSHA:  | 15 mg/m3 TWA (total dust)  |
| CAS No.                 | Ingredient Name & %                                       | OSHA:<br>ACGIH:  | 15 mg/m3 TWA (total dust)<br>10 mg/m3 TWA  |
| CAS No.                 | Ingredient Name & %                                       | OSHA:<br>ACGIH:<br>NIOSH:  | 15 mg/m3 TWA (total dust)<br>10 mg/m3 TWA<br>5000 mg/m3 IDLH   |
| CAS No.                 | Ingredient Name & %                                       | OSHA: ACGIH: NIOSH: Supplier:  | 15 mg/m3 TWA (total dust) 10 mg/m3 TWA 5000 mg/m3 IDLH No Established Limit  |
|                         | Ingredient Name & %  Titanium dioxide                     | OSHA: ACGIH: NIOSH: Supplier: OHSA, CAN:   | 15 mg/m3 TWA (total dust) 10 mg/m3 TWA 5000 mg/m3 IDLH No Established Limit 10 mg/m3 TWA (total dust)  |
|                         |   | OSHA: ACGIH: NIOSH: Supplier: OHSA, CAN: Mexico:   | 15 mg/m3 TWA (total dust) 10 mg/m3 TWA 5000 mg/m3 IDLH No Established Limit 10 mg/m3 TWA (total dust) 10 mg/m3 TWA (as Ti)20 mg/m3 STEL (as Ti)  |
|                         | Titanium dioxide  | OSHA: ACGIH: NIOSH: Supplier: OHSA, CAN: Mexico: Brazil:   | 15 mg/m3 TWA (total dust) 10 mg/m3 TWA 5000 mg/m3 IDLH No Established Limit 10 mg/m3 TWA (total dust) 10 mg/m3 TWA (as Ti)20 mg/m3 STEL (as Ti) No Established Limit   |
|                         | Titanium dioxide  | OSHA: ACGIH: NIOSH: Supplier: OHSA, CAN: Mexico: Brazil: Source  | 15 mg/m3 TWA (total dust) 10 mg/m3 TWA 5000 mg/m3 IDLH No Established Limit 10 mg/m3 TWA (total dust) 10 mg/m3 TWA (as Ti)20 mg/m3 STEL (as Ti) No Established Limit Health Data   |
|                         | Titanium dioxide  | OSHA: ACGIH: NIOSH: Supplier: OHSA, CAN: Mexico: Brazil:   | 15 mg/m3 TWA (total dust) 10 mg/m3 TWA 5000 mg/m3 IDLH No Established Limit 10 mg/m3 TWA (total dust) 10 mg/m3 TWA (as Ti)20 mg/m3 STEL (as Ti) No Established Limit  Health Data Lung tumors in animals   |
|                         | Titanium dioxide  | OSHA: ACGIH: NIOSH: Supplier: OHSA, CAN: Mexico: Brazil: Source  | 15 mg/m3 TWA (total dust) 10 mg/m3 TWA 5000 mg/m3 IDLH No Established Limit 10 mg/m3 TWA (total dust) 10 mg/m3 TWA (as Ti)20 mg/m3 STEL (as Ti) No Established Limit Health Data   |
|                         | Titanium dioxide  | OSHA: ACGIH: NIOSH: Supplier: OHSA, CAN: Mexico: Brazil: Source NIOSH:   | 15 mg/m3 TWA (total dust) 10 mg/m3 TWA 5000 mg/m3 IDLH No Established Limit 10 mg/m3 TWA (total dust) 10 mg/m3 TWA (as Ti)20 mg/m3 STEL (as Ti) No Established Limit  Health Data Lung tumors in animals   |
| CAS No.<br>0013463-67-7 | Titanium dioxide  | OSHA: ACGIH: NIOSH: Supplier: OHSA, CAN: Mexico: Brazil: Source NIOSH: Source  | 15 mg/m3 TWA (total dust) 10 mg/m3 TWA 5000 mg/m3 IDLH No Established Limit 10 mg/m3 TWA (total dust) 10 mg/m3 TWA (as Ti)20 mg/m3 STEL (as Ti) No Established Limit Health Data Lung tumors in animals Carcinogen Data Select Carcinogen: Yes   |
|                         | Titanium dioxide  | OSHA: ACGIH: NIOSH: Supplier: OHSA, CAN: Mexico: Brazil: Source NIOSH: Source OSHA: NTP:   | 15 mg/m3 TWA (total dust) 10 mg/m3 TWA 5000 mg/m3 IDLH No Established Limit 10 mg/m3 TWA (total dust) 10 mg/m3 TWA (as Ti)20 mg/m3 STEL (as Ti) No Established Limit Health Data Lung tumors in animals Carcinogen Data Select Carcinogen: Yes Known Carcinogen: No; Suspected Carcinogen: No  |
|                         | Titanium dioxide  | OSHA: ACGIH: NIOSH: Supplier: OHSA, CAN: Mexico: Brazil: Source NIOSH: Source OSHA:  | 15 mg/m3 TWA (total dust) 10 mg/m3 TWA 5000 mg/m3 IDLH No Established Limit 10 mg/m3 TWA (total dust) 10 mg/m3 TWA (as Ti)20 mg/m3 STEL (as Ti) No Established Limit Health Data Lung tumors in animals Carcinogen Data Select Carcinogen: Yes   |
|                         | Titanium dioxide  | OSHA: ACGIH: NIOSH: Supplier: OHSA, CAN: Mexico: Brazil: Source NIOSH: Source OSHA: NTP:   | 15 mg/m3 TWA (total dust)  10 mg/m3 TWA  5000 mg/m3 IDLH  No Established Limit  10 mg/m3 TWA (total dust)  10 mg/m3 TWA (as Ti)20 mg/m3 STEL (as Ti)  No Established Limit  Health Data  Lung tumors in animals  Carcinogen Data  Select Carcinogen: Yes  Known Carcinogen: No; Suspected Carcinogen: No  Group 1: No; Group 2A: No;   |
| 0013463–67–7            | Titanium dioxide<br>1.0 – 10% by Weight                   | OSHA: ACGIH: NIOSH: Supplier: OHSA, CAN: Mexico: Brazil: Source NIOSH: Source OSHA: NTP: IARC:   | 15 mg/m3 TWA (total dust) 10 mg/m3 TWA 5000 mg/m3 IDLH No Established Limit 10 mg/m3 TWA (total dust) 10 mg/m3 TWA (as Ti)20 mg/m3 STEL (as Ti) No Established Limit Health Data Lung tumors in animals Carcinogen Data Select Carcinogen: Yes Known Carcinogen: No; Suspected Carcinogen: No Group 1: No; Group 2A: No; Group 2b: Yes; Group 3: No; Group 4: No   |
| 0013463–67–7            | Titanium dioxide<br>1.0 – 10% by Weight                   | OSHA: ACGIH: NIOSH: Supplier: OHSA, CAN: Mexico: Brazil: Source NIOSH: Source OSHA: NTP: IARC:   | 15 mg/m3 TWA (total dust) 10 mg/m3 TWA 5000 mg/m3 IDLH No Established Limit 10 mg/m3 TWA (total dust) 10 mg/m3 TWA (as Ti)20 mg/m3 STEL (as Ti) No Established Limit  Health Data Lung tumors in animals  Carcinogen Data Select Carcinogen: Yes Known Carcinogen: No; Suspected Carcinogen: No Group 1: No; Group 2A: No; Group 2b: Yes; Group 3: No; Group 4: No   |
| 0013463–67–7            | Titanium dioxide<br>1.0 – 10% by Weight                   | OSHA: ACGIH: NIOSH: Supplier: OHSA, CAN: Mexico: Brazil: Source NIOSH: Source OSHA: NTP: IARC:   | 15 mg/m3 TWA (total dust) 10 mg/m3 TWA 5000 mg/m3 IDLH No Established Limit 10 mg/m3 TWA (total dust) 10 mg/m3 TWA (as Ti)20 mg/m3 STEL (as Ti) No Established Limit Health Data Lung tumors in animals Carcinogen Data Select Carcinogen: Yes Known Carcinogen: No; Suspected Carcinogen: No Group 1: No; Group 2A: No; Group 2b: Yes; Group 3: No; Group 4: No  Exposure Data No Established Limit 2 mg/m3 TWA (particulate matter containing no asbestos and  |
| 0013463–67–7            | Titanium dioxide<br>1.0 – 10% by Weight                   | OSHA: ACGIH: NIOSH: Supplier: OHSA, CAN: Mexico: Brazil: Source NIOSH: Source OSHA: NTP: IARC: Source OSHA: ACGIH: NIOSH:                                      | 15 mg/m3 TWA (total dust) 10 mg/m3 TWA 5000 mg/m3 IDLH No Established Limit 10 mg/m3 TWA (total dust) 10 mg/m3 TWA (as Ti)20 mg/m3 STEL (as Ti) No Established Limit Health Data Lung tumors in animals Carcinogen Data Select Carcinogen: Yes Known Carcinogen: No; Suspected Carcinogen: No Group 1: No; Group 2A: No; Group 2b: Yes; Group 3: No; Group 4: No  Exposure Data No Established Limit 2 mg/m3 TWA (particulate matter containing no asbestos and 2 mg/m3 TWA (containing no Asbestos and  |
| 0013463–67–7            | Titanium dioxide<br>1.0 – 10% by Weight                   | OSHA: ACGIH: NIOSH: Supplier: OHSA, CAN: Mexico: Brazil: Source NIOSH: Source OSHA: NTP: IARC: Source OSHA: ACGIH: NIOSH: Supplier:                            | 15 mg/m3 TWA (total dust) 10 mg/m3 TWA 5000 mg/m3 IDLH No Established Limit 10 mg/m3 TWA (total dust) 10 mg/m3 TWA (as Ti)20 mg/m3 STEL (as Ti) No Established Limit Health Data Lung tumors in animals Carcinogen Data Select Carcinogen: Yes Known Carcinogen: No; Suspected Carcinogen: No Group 1: No; Group 2A: No; Group 2b: Yes; Group 3: No; Group 4: No  Exposure Data No Established Limit 2 mg/m3 TWA (particulate matter containing no asbestos and 2 mg/m3 TWA (containing no Asbestos and No Established Limit   |
| 0013463–67–7<br>CAS No. | Titanium dioxide 1.0 – 10% by Weight  Ingredient Name & % | OSHA: ACGIH: NIOSH: Supplier: OHSA, CAN: Mexico: Brazil: Source NIOSH: Source OSHA: NTP: IARC: Source OSHA: ACGIH: NIOSH: Supplier: OHSA, CAN:                 | 15 mg/m3 TWA (total dust) 10 mg/m3 TWA 5000 mg/m3 IDLH No Established Limit 10 mg/m3 TWA (total dust) 10 mg/m3 TWA (as Ti)20 mg/m3 STEL (as Ti) No Established Limit Health Data Lung tumors in animals Carcinogen Data Select Carcinogen: Yes Known Carcinogen: No; Suspected Carcinogen: No Group 1: No; Group 2A: No; Group 2b: Yes; Group 3: No; Group 4: No  Exposure Data No Established Limit 2 mg/m3 TWA (particulate matter containing no asbestos and 2 mg/m3 TWA (containing no Asbestos and No Established Limit 2 mg/m3 TWA (containing no Asbestos and   |
| 0013463–67–7<br>CAS No. | Titanium dioxide 1.0 – 10% by Weight  Ingredient Name & % | OSHA: ACGIH: NIOSH: Supplier: OHSA, CAN: Mexico: Brazil: Source NIOSH: Source OSHA: NTP: IARC: Source OSHA: ACGIH: NIOSH: Supplier: OHSA, CAN: Mexico:         | 15 mg/m3 TWA (total dust) 10 mg/m3 TWA 5000 mg/m3 IDLH No Established Limit 10 mg/m3 TWA (total dust) 10 mg/m3 TWA (as Ti)20 mg/m3 STEL (as Ti) No Established Limit Health Data Lung tumors in animals Carcinogen Data Select Carcinogen: Yes Known Carcinogen: No; Suspected Carcinogen: No Group 1: No; Group 2A: No; Group 2b: Yes; Group 3: No; Group 4: No  Exposure Data No Established Limit 2 mg/m3 TWA (particulate matter containing no asbestos and 2 mg/m3 TWA (containing no Asbestos and 2 mg/m3 TWA (respirable fraction)  |
| 0013463–67–7<br>CAS No. | Titanium dioxide 1.0 – 10% by Weight  Ingredient Name & % | OSHA: ACGIH: NIOSH: Supplier: OHSA, CAN: Mexico: Brazil: Source NIOSH: Source OSHA: NTP: IARC: Source OSHA: ACGIH: NIOSH: Supplier: OHSA, CAN: Mexico: Brazil: | 15 mg/m3 TWA (total dust) 10 mg/m3 TWA 5000 mg/m3 IDLH No Established Limit 10 mg/m3 TWA (total dust) 10 mg/m3 TWA (as Ti)20 mg/m3 STEL (as Ti) No Established Limit  Health Data Lung tumors in animals  Carcinogen Data  Select Carcinogen: Yes Known Carcinogen: No; Suspected Carcinogen: No Group 1: No; Group 2A: No; Group 2b: Yes; Group 3: No; Group 4: No  Exposure Data  No Established Limit 2 mg/m3 TWA (particulate matter containing no asbestos and 2 mg/m3 TWA (containing no Asbestos and 2 mg/m3 TWA (containing no Asbestos and 2 mg/m3 TWA (respirable fraction) No Established Limit   |
| 0013463–67–7            | Titanium dioxide 1.0 – 10% by Weight  Ingredient Name & % | OSHA: ACGIH: NIOSH: Supplier: OHSA, CAN: Mexico: Brazil: Source NIOSH: Source OSHA: NTP: IARC: Source OSHA: ACGIH: NIOSH: Supplier: OHSA, CAN: Mexico:         | 15 mg/m3 TWA (total dust) 10 mg/m3 TWA 5000 mg/m3 IDLH No Established Limit 10 mg/m3 TWA (total dust) 10 mg/m3 TWA (as Ti)20 mg/m3 STEL (as Ti) No Established Limit Health Data Lung tumors in animals Carcinogen Data Select Carcinogen: Yes Known Carcinogen: No; Suspected Carcinogen: No Group 1: No; Group 2A: No; Group 2b: Yes; Group 3: No; Group 4: No  Exposure Data No Established Limit 2 mg/m3 TWA (particulate matter containing no asbestos and 2 mg/m3 TWA (containing no Asbestos and 2 mg/m3 TWA (crespirable fraction) |

|                                  |   | Source   | Carcinogen Data  |  |  |
|----------------------------------|---|--|--|--|--|
|                                  |   | OSHA:  | Select Carcinogen: No  |  |  |
|                                  |   | NTP:   | Known Carcinogen: No; Suspected Carcinogen: No   |  |  |
|                                  |   |  | Group 1: No; Group 2A: No;   |  |  |
|                                  |   | IARC:  | Group 2b: No; Group 3: Yes; Group 4: No  |  |  |
| CAS No.                          | Ingredient Name & %   | Source   | Exposure Data  |  |  |
|                                  |   | OSHA:  | No Established Limit   |  |  |
|                                  |   | ACGIH:   | No Established Limit   |  |  |
|                                  |   | NIOSH:   | No Established Limit   |  |  |
|                                  |   | Supplier:  | No Established Limit   |  |  |
|                                  | Reaction of epichlorohydrin and   | OHSA, CAN:   | No Established Limit   |  |  |
| 0025085–99–8                     | bisphenol A<br>25 – 50% by Weight   | Mexico:  | No Established Limit   |  |  |
|                                  | 23 – 30 % by Weight   | Brazil:  | No Established Limit   |  |  |
|                                  |   | Source   | Health Data  |  |  |
|                                  |   | NIOSH:   | No Established Limit   |  |  |
|                                  |   | Source   | Carcinogen Data  |  |  |
|                                  |   | OSHA:  | Select Carcinogen: No  |  |  |
|                                  |   | NTP:   | Known Carcinogen: No; Suspected Carcinogen: No   |  |  |
|                                  |   | IARC:  | Group 1: No; Group 2A: No;<br>Group 2b: No; Group 3: No; Group 4: No   |  |  |
| AS No.                           | Ingredient Name & %   | Source   | Exposure Data  |  |  |
|                                  |   | OSHA:  | No Established Limit   |  |  |
|                                  |   | ACGIH:   | No Established Limit   |  |  |
|                                  |   | NIOSH:   | No Established Limit   |  |  |
|                                  |   | Supplier:  | No Established Limit   |  |  |
|                                  |   | OHSA, CAN:   | No Established Limit   |  |  |
| 064742–95–6                      | Petroleum naphtha 1.0 – 10% by Weight   | Mexico:  | No Established Limit   |  |  |
|                                  |   | Brazil:  | No Established Limit   |  |  |
|                                  |   | Source   | Health Data  |  |  |
|                                  |   | NIOSH:   | No Established Limit   |  |  |
|                                  |   | Source   | Carcinogen Data  |  |  |
|                                  |   | OSHA:  | Select Carcinogen: No  |  |  |
|                                  |   | NTP:   | Known Carcinogen: No; Suspected Carcinogen: No   |  |  |
|                                  |   | IARC:  | Group 1: No; Group 2A: No;<br>Group 2b: No; Group 3: No; Group 4: No   |  |  |
|                                  | 3   | 3. HAZARD IDEN   | NTIFICATION  |  |  |
| Overview:                        |   | ge. Intentional misus  | olonged occupational overexposure to solvents with permanent se by deliberately concentrating and inhaling the contents may bothing. |  |  |
| nhalation:                       | Harmful if inhaled. Causes nose and throat irritation. Vapors may affect the brain or nervous system causing dizzines headache or nausea. |  |  |  |  |
| yes:                             | Causes severe eye irritation. Avoid contact with eyes.  |  |  |  |  |
| Laborate                         | Causes skin irritation. May be harmful if absorbed through the skin.  |  |  |  |  |
| KIN:                             | Harmful if swallowed. May cause abdominal pain, nausea, vomiting, diarrhea, or drowsiness.  |  |  |  |  |
|                                  | riamman in ornamonioa. May baab   | Possible cancer hazard. Contains an ingredient which may cause cancer based on animal data (See Section 2 and Section 15 for each ingredient). Risk of cancer depends on duration and level of exposure. |  |  |  |
| Skin: ngestion: Chronic Effects: | Possible cancer hazard. Contain   |  |  |  |  |

Remove contaminated clothing and shoes. Get medical attention immediately. Wash clothing before reuse. Thoroughly

General:

clean or destroy contaminated shoes.

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If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get Inhalation:

medical attention immediately.

In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention Eyes:

immediately.

Respiratory:

Eyes:

Skin: In case of contact, immediately flush skin with soap and plenty of water. Get medical attention immediately.

If swallowed, immediately contact Poison Control Center at 1-800-854-6813. DO NOT induce vomiting unless Ingestion:

instructed to do so by medical personnel. Never give anything by mouth to an unconscious person.

#### PROTECTIVE EQUIPMENT AND CONTROL MEASURES

Select equipment to provide protection from the ingredients listed in Section 2 of this document. Ensure fresh air entry during application and drying. If you experience eye watering, headache or dizziness or if air monitoring demonstrates dust, vapor, or mist levels are above applicable limits, wear an appropriate, properly fitted respirator (NIOSH approved)

during and after application. Follow respirator manufacturer's directions for respirator use. FOR USERS OF 3M RESPIRATORY PROTECTION ONLY: For information and assistance on 3M occupational health and safety products, call OH&ESD Technical Service toll free in U.S.A. 1-800-243-4630, in Canada call 1-800-267-4414. Please do not

contact these numbers regarding other manufacturer's respiratory protection products. 3M does not endorse the

accuracy of the information contained in this Material Safety Data Sheet.

Avoid contact with eyes. Protective equipment should be selected to provide protection from exposure to the chemicals

listed in Section 2 of this document. Depending on the site-specific conditions of use, safety glasses, chemical goggles, and/or head and face protection may be required to prevent contact. The equipment must be thoroughly

cleaned, or discarded after each use.

Protective equipment should be selected to provide protection from exposure to the chemicals listed in Section 2 of this Skin/Hand:

document. Depending on the site-specific conditions of use, protective gloves, apron, boots, head and face protection may be required to prevent contact. The equipment must be thoroughly cleaned, or discarded after each use.

Engineering Controls: Prevent build-up of vapors by opening all windows and doors to achieve cross-ventilation.

Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential

exposure. Use good personal hygiene practices. Wash hands before eating, drinking, using toilet facilities, etc. Other Work Practices: Promptly remove soiled clothing and wash clothing thoroughly before reuse. Shower after work using plenty of soap

and water.

### FIRE AND EXPLOSION INFORMATION

Flash Point: F: 80

C: 27

Lower Explosive Limit (LEL): 1.5 (%vol in air) at Normal Atmospheric Temp and Pressure

Flammable liquid and vapor. HIGHLY FLAMMABLE MATERIALS: Will be easily ignited by heat, sparks or

flames. Vapors may form explosive mixtures with air. Vapors may travel to source of ignition and flash back. Most vapors are heavier than air. They will spread along ground and collect in low or confined areas (sewers, basements, tanks) creating a vapor explosion hazard. Runoff to sewers may create fire or

explosion hazard. Containers may explode when heated. Many liquids are lighter than water.

CAUTION: This product has a very low flashpoint. Use of water spray when fighting fire may be inefficient. CAUTION: For mixtures containing alcohol or polar solvent, alcohol-resistant foam may be more effective.

Fire Fighting Procedures: SMALL FIRES: Use dry chemical, CO2, water spray or regular foam. LARGE FIRES: Use water spray, fog,

or regular foam. Do not use straight streams. Move containers from fire area if you can do so without risk.

Also Reference Emergency Response Guide Number: 128

#### PHYSICAL AND CHEMICAL PROPERTIES 7.

Physical State: Liquid Grey

No Established Limit pH:

Specific Gravity: 1.647355

Boiling Point (F): 279

Fire and Explosion Hazards:

Vapor Density: Heavier than air

VOC Content (lbs): Refer to the Technical Data Sheet for this product.

Evaporation Rate: Slower than ether

VOHAP content (gm/litre of paint):134.97 (as supplied) VOHAP content (gm/litre of Solid 184.38 (as supplied)

Coating):

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#### 8. STABILITY AND REACTIVITY DATA

| Comercia                              | This product is stable and hazardous polymerization will not occur. Not sensitive to mechanical impact. Excessive  |
|---------------------------------------|--|
| General:                              | heat and fumes generation can occur if improperly handled.   |
| la a a serie a tila la Mada si a la c | Observation and the last state of the last state |

Incompatible Materials: Strong oxidizing agents.

Hazardous Decomposition: May produce hazardous fumes when heated to decomposition as in welding. Fumes may produce Carbon

Dioxide and Carbon Monoxide.

#### 9. HANDLING AND STORAGE

Storage Temperature: Store between 40–100F (4–38C).

Handling and Storage Precautions:

Keep away from heat, sparks and flame. Do not smoke. Extinguish all flames and pilot lights, and turn off stoves, heaters, electric motors and other sources of ignition during use and until all vapors are gone. Vapors may cause flash fire or ignite explosively. Prevent build—up of vapors by opening all windows and doors to achieve cross—ventilation. Avoid contact with eyes and clothing. Avoid prolonged or repeated contact with skin. Close container after each use. Wash thoroughly after handling.

#### 10. TOXICOLOGICAL DATA

NOTICE: Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal. No additional information provided for this product. See Section 2 for chemical specific data.

#### 11. ECOLOGICAL DATA

General: Not Defined No additional information provided for this product. See Section 2 for chemical specific data.

#### 12. ACCIDENTAL RELEASE MEASURES

ELIMINATE ALL IGNITION SOURCES (no smoking, flares, sparks or flames in immediate area). Use only non–sparking equipment to handle spilled material and absorbent. Do not touch or walk through spilled material. Spill Response Procedures: Stop leak if you can do so without risk. Prevent entry into waterways, sewers, basements or confined areas. A vapor suppressing foam may be used to reduce vapors. Absorb or cover with dry earth, sand, or other non–combustible material and transfer to containers. Use non–sparking tools to collect absorbed material. CALL CHEMTREC at (800)–424–9300 for emergency response. Isolate spill or leak area immediately for at least 50 meters (150 feet) in all directions. Keep unauthorized personnel away. Stay upwind. Keep out of low areas. Public Safety:

Ventilate closed spaces before entering. LARGE SPILLS: Consider initial downwind evacuation for at least 300

meters (1000 feet).

Also, Reference Emergency Response Guide Number: 128

#### 13. DISPOSAL CONSIDERATION

Waste Disposal:

Dispose of in accordance with local, state and federal regulations. (Also reference RCRA information in Section 15 if listed).

### 14. TRANSPORTATION INFORMATION

| DOT (Domestic                   | Surface Transportation) | IMO /                  | IMDG (Ocean Transportation)          |
|---------------------------------|-------------------------|------------------------|--------------------------------------|
| DOT Proper Shipping Name: PAINT | . ,                     | IMDG Proper Shipping N | Name:                                |
| DOT Hazard Class:               | 3                       | IMDG Hazard Class:     | 3 - Flammable and Combustible liquid |
| UN / NA Number:                 | UN 1263                 | UN Number:             | UN 1263                              |
| DOT Packing Group:              | III                     | IMDG Packing Group:    | III                                  |
| CERCLA/DOT RQ:                  | 112 gal. / 1531 lbs.    | System Reference Code  | e: 1                                 |

## 15. REGULATORY INFORMATION

| 15.   | REGULATORY INFORMATION  |
|---|---|
| Regulatory Overview:  | The regulatory data in Section 15 is not intended to be all–inclusive, only selected regulations are represented. All ingredients of this product are listed on the TSCA (Toxic Substance Control Act) Inventory or are not required to be listed on the TSCA Inventory.  Note: Any chemical ingredients listed in Section 15, that do not also appear in Section 2, are contained in the product at a concentration below the applicable OSHA threshold level of 1% or 0.1%. |
| WHMIS Classification:   | No Established Limit  |
| Regulatory List   | Product Ingredients on List   |
| DOT Marine Pollutants (10%): (No Product Ingredients Listed) DOT Severe Marine Pollutants (1%): (No Product Ingredients Listed) EPCRA 311/312 Chemicals and RQs (>.1%): | · ·   |
| 0000100-41-4<br>0000071-36-3<br>0001330-20-7<br>EPCRA 302 Extremely<br>Hazardous (>.1%):<br>(No Product Ingredients<br>Listed)<br>EPCRA 313 Toxic Chemicals<br>(>.1%):  | Benzene, ethyl- : 1000 lb final RQ; 454 kg final RQ<br>Butanol : 5000 lb final RQ; 2270 kg final RQ<br>Xylenes (o-, m-, p- isomers) : 100 lb final RQ; 45.4 kg final RQ   |
| 0000095-63-6  | 1,2,4–Trimethyl benzene   |
| 0000100-41-4  | Benzene, ethyl-   |
| 0000071–36–3  | Butanol   |
| 0001330-20-7  | Xylenes (o-, m-, p- isomers)  |
| Mass RTK Substances (>1%) : 0000095–63–6  | 1,2,4-Trimethyl benzene   |
| 0000100-41-4  | Benzene, ethyl–   |
| 0001317–65–3  | Limestone   |
| 0000071-36-3  | Butanol   |
| 0007631-86-9  | Silica, amorphous   |
| 0014807-96-6  | Talc  |
| 0013463–67–7<br>0001330–20–7  | Titanium dioxide  |
| Mass Extraordinarily Haz Sub  | Xylenes (o-, m-, p- isomers)  |
| (>.01%) :   |   |
| 0014808-60-7  | Quartz  |
| 0014464-46-1  | Silica, cristobalite  |
| Penn RTK Substances (>1%):  | 4.0.4 Térrothodhannan   |
| 0000095–63–6<br>0000100–41–4  | 1,2,4–Trimethyl benzene Benzene, ethyl–   |
| 000100-41-4   | Limestone   |
| 0000071-36-3  | Butanol   |
| 0007631-86-9  | Silica, amorphous   |
| 0014807-96-6  | Talc  |
| 0013463-67-7  | Titanium dioxide  |
| 0001330-20-7  | Xylenes (o-, m-, p- isomers)  |
| Penn Special Hazardous<br>Substances (>.01%):   |   |
| (No Product Ingredients   |   |
| Listed)   |   |
| Rhode Island Hazardous  |   |
| Substances (>.1%):  |   |
| 0000100-41-4  | Benzene, ethyl-   |
| 0001317-65-3  | Limestone   |
| 0000071-36-3  | Butanol   |
| 0014807-96-6<br>0013463-67-7  | Talc Titanium dioxida   |

Titanium dioxide

0013463-67-7

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0001330-20-7
                               Xylenes (o-, m-, p- isomers)
RCRA Status (%):
  0007440-38-2
                               Arsenic: .00015
  0007440-47-3
                               Chromium: .00178
N.J. RTK Substances (>1%):
  0000095-63-6
                               1,2,4-Trimethyl benzene
  0000100-41-4
                               Benzene, ethyl-
  0001317-65-3
                               Limestone
  0000071-36-3
                               Butanol
  0014807-96-6
                               Talc
  0013463-67-7
                               Titanium dioxide
  0001330-20-7
                               Xylenes (o-, m-, p- isomers)
N.J. Special Hazardous
Substances (>.01%):
  0007429-90-5
                               Aluminum
  0000098-82-8
                               Cumene
  0000100-41-4
                               Benzene, ethyl-
  0000071-36-3
                               Butanol
  0014808-60-7
                               Quartz
  0014464-46-1
                               Silica, cristobalite
  0007440-21-3
                               Silicon
  0007440-32-6
                               Titanium
  0001330-20-7
                               Xylenes (o-, m-, p- isomers)
N.J. Env. Hazardous Substances
(>.1%):
  0000095-63-6
                               1,2,4-Trimethyl benzene
  0000100-41-4
                               Benzene, ethyl-
  0000071-36-3
                               Butanol
  0001330-20-7
                               Xylenes (o-, m-, p- isomers)
Proposition 65 - Carcinogens
(>0%):
  0000098-82-8
                               Cumene
  0000100-41-4
                               Benzene, ethyl-
  0007440-02-0
                               Nickel
  0014808-60-7
                               Quartz
Proposition 65 - Female Repro
Toxins (>0%):
     (No Product Ingredients
Proposition 65 - Male Repro
Toxins (>0%):
     (No Product Ingredients
Listed)
Proposition 65 - Developmental
Toxins (>0%):
     (No Product Ingredients
Listed)
```

### 16. OTHER INFORMATION

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information contained herein. We accept no responsibility and disclaim all liability for any harmful effects which may be caused by exposure to our products. Customers/users of this product must comply with all applicable health and safety laws, regulations, and orders.

#### FOR PROFESSIONAL USE ONLY

**IMPORTANT NOTE** The information in this data sheet is not intended to be exhaustive and is based on the present state of our knowledge and on current laws: any person using the product for any purpose other than that specifically recommended in the technical data sheet without first obtaining written confirmation from us as to the suitability of the product for the intended purpose does so at his own risk. It is always the responsibility of the user to take all necessary steps to fulfill the demands set out in the local rules and legislation. Always read the Material Data Sheet and the Technical Data Sheet for this product if available. All advice we give or any statement made about the product by us (whether in this data sheet or otherwise) is correct to the best of our knowledge but we have no control over the quality or the condition of the substrate or the many factors affecting the use and application of the product. Therefore, unless we specifically agree in writing otherwise, we do not accept any liability whatsoever for the performance of the product or for any loss or damage arising out of the use of the product. All products supplied and technical advice given are subject to our standard terms and conditions of sale. You should request a copy of this document and review it carefully. The information contained in this data sheet is subject to modification from time to time in the light of

experience and our policy of continuous development. It is the user's responsibility to verify that this data sheet is current prior to using the product.

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## **Head Office**

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